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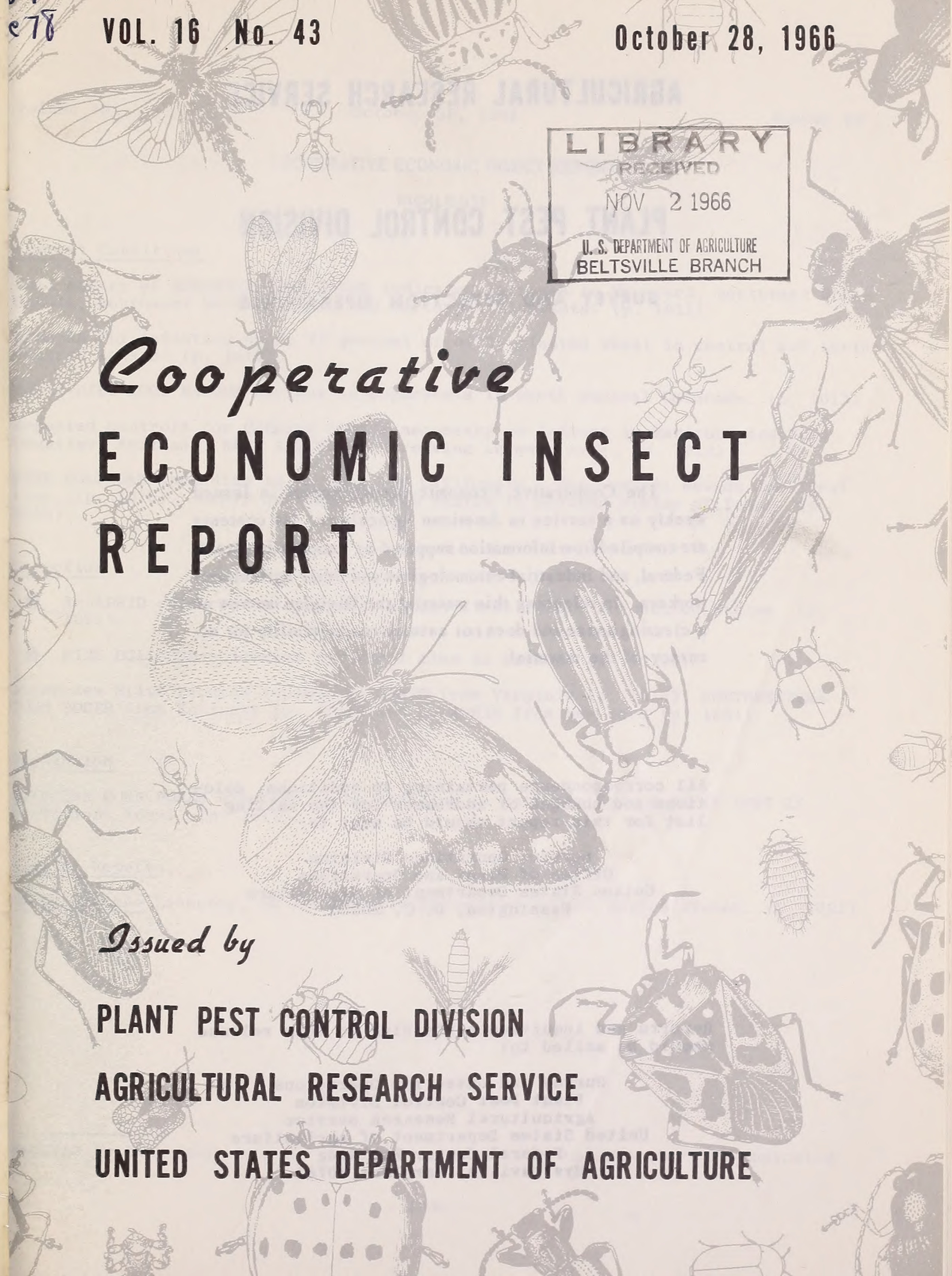

Cooperative ECONOMIC INSECT REPORT

Issued by

PLANT PEST CONTROL DIVISION
AGRICULTURAL RESEARCH SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

SURVEY AND DETECTION OPERATIONS

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

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Volume 16 October 28, 1966 Number 43

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

Fall survey of EUROPEAN CORN BORER indicates increase in Missouri, northeast South Dakota, southeast North Dakota, and northwest Minnesota. (p. 1011).

HESSIAN FLY infesting up to 75 percent of early planted wheat in central and north central Kansas. (p. 1012).

SUGAR-BEET ROOT MAGGOT serious on sugarbeets in north central Colorado. (p. 1013).

Repeated controls for CABBAGE LOOPER necessary on lettuce in Maricopa and Yuma Counties, Arizona. BEET ARMYWORM increasing in same area. (p. 1013).

PINK BOLLWORM spreading in Arizona and California. Detected in Nevada for first time. (p. 1016). Heavy buildup of BOLL WEEVIL in Rolling Plains of Texas. (p. 1016).

Detection

● An APHID collected at Augusta, Maine; first record for United States. (p. 1021).

● PINK BOLLWORM collected for first time in Nevada. (p. 1016).

Other new State records include an APHID from Virginia (p. 1014), SOUTHWESTERN CORN BORER from Kentucky (p. 1011) and an APHID from New York (p. 1021).

Prediction

EUROPEAN CORN BORER expected to be damaging in southern Minnesota in 1967 if conditions ideal. (p. 1011).

Special Report

Aphis craccae Linnaeus, an Aphid Newly Discovered in the United States. (p. 1021).

Reports in this issue are for week ending October 21 unless otherwise indicated

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WEATHER OF THE WEEK ENDING OCTOBER 24

HIGHLIGHTS: Heavy showers fell over the Appalachians and the Northeast, while a storm in the Northwest brought rains to the coast and heavy snow to the Cascades. In between, high pressure and clear cool weather predominated from the Great Basin to the Appalachians.

TEMPERATURE: Temperatures averaged below normal over most of the Nation. Arkansas and nearby portions of neighboring States were 9° or more colder than normal. Only the California coast, the Florida Peninsula, and the Georgia and Carolina coast averaged near or slightly above normal. San Antonio, Texas, set a new low temperature record for so early in the season when the temperature dropped to 34°. Pueblo, Colorado, set a new record with an 18° reading.

PRECIPITATION: Early in the week, a low pressure system over the eastern United States produced rain from the central Great Plains to the Atlantic Ocean. The heaviest fell from the Appalachians to the middle Atlantic coast, with Tuesday's and Wednesday's totals exceeding 3 inches from Atlanta, Georgia, to Philadelphia, Pennsylvania. Up to 2 inches of snow fell in the mountains of West Virginia. Rain continued to soak the northeastern States on Thursday. Also, on Thursday, a new storm moved into the Pacific Northwest. It brought heavy rain to the coast, almost 4 inches at Astoria, Oregon, and unusually heavy snow to the Cascades (snow accumulated to 10 inches at the 3,000-foot level and to 30 inches at 5,500 feet). The snow continued in the Cascades on Friday while spreading to the higher elevations of the northern Rockies.

Weather continued on page 1018.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

CORN EARWORM (Heliothis zea) - ILLINOIS - Survey in southeast district showed increase in abundance and damage by this pest compared with 1965. (White). ALABAMA - Larvae still heavy in late plantings of sweet corn in Lee and other central counties. (Barwood et al.). ARIZONA - Populations on lettuce in Yuma and Maricopa Counties decreased week ending October 14. Larvae continue damaging sorghum in Yuma County, particularly late planted fields. (Ariz. Coop. Sur.). CALIFORNIA - Larvae mining stems of Callistemon sp. nursery stock in Ontario, San Bernardino County. This species more severe on occasional hosts than for many years. (Cal. Coop. Rpt.).

CORN LEAF APHID (Rhopalosiphum maidis) - WISCONSIN - Common in rye fields in Kenosha County. More than 50 percent of corn examined over State affected; many active colonies still present. (Wis. Ins. Sur.). KANSAS - Moderate in corn not yet completely dry in northeast area. (Simpson).

GREENBUG (Schizaphis graminum) - NEW MEXICO - Occasional aphid found in winter wheat in Curry and Roosevelt Counties. Populations appear extremely light. (Mathews, Nielsen).

SPOTTED ALFALFA APHID (Therioaphis maculata) - VIRGINIA - Light, 1-10 per sweep, on alfalfa in Bedford County. (Isakson). ARKANSAS - Counts very low on alfalfa in northwest area. (Boyer). WISCONSIN - Populations higher than anticipated in Kenosha County; up to 10 per 50 sweeps. (Wis. Ins. Sur.).

POTATO LEAFHOPPER (Empoasca fabae) - WISCONSIN - Nymphs and adults noted in many southeastern area alfalfa fields; up to 3 per sweep along margins at several locations. (Wis. Ins. Sur.).

CORN, SORGHUM, SUGARCANE

EUROPEAN CORN BORER (Ostrinia nubilalis) - DELAWARE - State average, 307 borers per 100 plants represents 32 percent increase over 1965 fall population of 209. This fourth consecutive year of noticeable increase. (Burbutis). ALABAMA - Larvae damaging grain sorghum stems in 6-acre field in Jackson County. (White). ARKANSAS - Infestations much lower in northwest area than in northeast area. (Boyer). MISSOURI - Statewide averages higher than in past 10 years. Only southeast district with lower percentage infested plants and lower numbers of borers per 100 plants than in 1965. State average 299.6 borers per 100 stalks compared with 145.2 in 1965. (Munson). ILLINOIS - Larvae collected in July and August found to be only 16.8 percent infested with microsporidiosis. (White). MINNESOTA - Number of borers per 100 plants increased in all reporting districts. High in northwest, primarily in Norman and Mahnomen Counties. Borer populations moderate in southwest, south central and west central districts but damage low this year. Damaging numbers expected in 1967 if conditions ideal. (Minn. Ins. Rpt.). SOUTH DAKOTA - Fall abundance survey completed in Brown, Codington, Day, Deuel, Grant, Hamlin, Marshall, and Roberts Counties. Increases indicated in Brown, Day and Roberts Counties. (Jones). NORTH DAKOTA - Fall abundance survey indicates increase in borer populations in Richland, Ransom, Sargent, Dickey and Cass Counties compared with 1965. (Brandvik).

SOUTHWESTERN CORN BORER (Zeadiatraea grandiosella) - KENTUCKY - Collected for first time in State October 6. Infestations found in Calloway, Graves, Fulton, Hickman, Marshall, McCracken, Carlisle, and Ballard Counties. Percent girdled stalks 4-28 and infestations 4-68. (Townsend, Pass). ILLINOIS - Percent infested stalks increased from 1.73 in 1965 to 3.66 this year in 7 southern counties. Found for first time in Jackson, Williamson and Saline Counties. (White).

FALL ARMYWORM (Spodoptera frugiperda) - ALABAMA - Larvae continue to damage stalks and ears of late corn in isolated fields in Chilton and other central counties. (McQueen). KANSAS - Infestations ranged 0-5 percent with injury to corn occurring at junction of leaf sheath and nodes, (Wiseman). Numerous dead, full-grown larvae found in 3 Washington County fields. (Simpson).

PINK SCAVENGER CATERPILLAR (Sathrobrota rileyi) - ALABAMA - Larvae medium to heavy in ears of corn in Chilton, Coosa, Talladega, and St. Clair Counties; will continue as stored grain pest during winter months. (McQueen).

CORN ROOTWORMS (Diabrotica spp.) - MINNESOTA - Adults of D. longicornis and D. virgifera still active in corn in southern half of State. (Minn. Ins. Rpt., Oct. 14).

CHINCH BUG (Blissus leucopterus) - KANSAS - Moderate, 25-50 per plant, on corn in Marshall, Washington and Clay Counties. (Simpson).

SMALL GRAINS

HESSIAN FLY (Mayetiola destructor) - KANSAS - Late-planted wheat in central and north central areas ranged trace to 25 percent infested. Up to 75 percent of plants infested in early planted fields. Heavy in volunteer wheat in Russell and Ellis Counties, light in Barton County. (Simpson).

GREEN JUNE BEETLE (Cotinis nitida) - VIRGINIA - Larvae very severe in barley field in Franklin County; field disked up. (Welch, Isakson).

APHIDS - WISCONSIN - Anuraphis bakeri and Macrosiphum avenae common in rye in Kenosha County. (Wis. Ins. Sur.).

FORAGE LEGUMES

ALFALFA WEEVIL (Hypera postica) - VIRGINIA - Adults averaged 1 per 10 sweeps in alfalfa in Franklin and Bedford Counties. (Isakson). WISCONSIN - None found in over 40 fields of alfalfa checked in Kenosha and Walworth Counties (southeast area); 150-1,000 sweeps taken in each field. Sitona spp. common in most fields; few adults of H. punctata also present. (Wis. Ins. Sur.).

CLOVER ROOT CURCULIO (Sitona hispidula) - WYOMING - Adults averaged 2 per 25 sweeps in Goshen County alfalfa. (Haws, Marks).

CORN ROOTWORMS (Diabrotica spp.) - WISCONSIN - D. longicornis and D. undecimpunctata howardi adults 1-3 per 50 sweeps in Kenosha County alfalfa. (Wis. Ins. Sur.).

ALFALFA CATERPILLAR (Colias eurytheme) - NORTH DAKOTA - Larvae 80 per 100 sweeps in alfalfa in Richland County. (Brandvik, Oct. 14). VIRGINIA - Larvae light in alfalfa in Bedford and Franklin Counties. (Isakson).

LYGUS BUGS (Lygus spp.) - WYOMING - Adults averaged 4-5 per 10 sweeps in Goshen County alfalfa. (Haws, Marks). NORTH DAKOTA - L. lineolaris adults 100 per 100 sweeps in alfalfa in Richland and Ransom Counties. (Brandvik, Oct. 14).

MEADOW SPITTLEBUG (Philaenus spumarius) - VIRGINIA - Adults 2-6 per 10 sweeps on alfalfa in Bedford and Franklin Counties. (Isakson).

PEA APHID (Acyrthosiphon pisum) - VIRGINIA - Ranged 30-70 per sweep on alfalfa in Franklin and Bedford Counties. Both winged and nonwinged forms present. (Isakson). WISCONSIN - Populations high on alfalfa; 200-500 per sweep in southeastern counties. (Wis. Ins. Sur.). NORTH DAKOTA - Remains high on alfalfa in Richland and Ransom Counties; over 1,000 per 100 sweeps in some fields. Lady beetle adults 10 per 100 sweeps in same fields. (Brandvik, Oct. 14). WYOMING - Ranged 12-20 per 25 sweeps in Goshen County alfalfa. (Haws, Marks).

SOYBEANS

BEAN LEAF BEETLE (Cerotoma trifurcata) - MISSISSIPPI - Damaging leaves of young soybeans in Oktibbeha County. (Dinkins, Oct. 14).

STINK BUGS - SOUTH CAROLINA - Infestations scattered on soybeans in most counties. (Thomas, Oct. 18). ALABAMA - Acrosternum hilare heavy and widespread in soybeans throughout Geneva County. (Smith).

PEANUTS

RED-NECKED PEANUTWORM (Stegasta bosqueella) - NEW MEXICO - Found in terminals of peanut plants in Roosevelt County; heavy in majority of fields. Populations much heavier than last year. (Mathews, Nielsen).

COTTON

BOLL WEEVIL (Anthonomus grandis) - ALABAMA - Large numbers of adults occurring in cotton in Montgomery, Chilton, Talladega, and St. Clair Counties. (McQueen). MISSISSIPPI - Continues to damage green bolls and squares in Yazoo County. (Dinkins, Oct. 14). For Boll Weevil in Texas, see page 1016.

For Boll Weevil complex in Arizona, see page 1016.

BOLLWORMS (Heliothis spp.) - ALABAMA - Numerous larvae observed feeding on squares and leaves of cotton in Montgomery and other central counties. No economic damage noted. (McQueen). MISSISSIPPI - H. zea and H. virescens larvae still found in terminal areas of green cotton; feeding on green bolls and squares in Yazoo County. (Dinkins, Oct. 14). ARIZONA - Spotted and heavy H. zea populations damaging top bolls in Yuma, Pinal and Maricopa Counties. (Ariz. Coop. Sur.).

STINK BUGS - NEW MEXICO - Light damage noted in Lea County cotton fields; light to moderately heavy in Chaves County. (Mathews).

SUGARBEETS

SUGAR-BEET ROOT MAGGOT (Tetanops myopaeformis) - COLORADO - Widespread and serious in Weld, Adams and Larimer Counties. (Jenkins).

POTATOES, TOMATOES, PEPPERS

POTATO TUBERWORM (Phthorimaea operculella) - VIRGINIA - Mining leaves and stems of potatoes on Eastern Shore. Larvae infesting harvested potatoes in Nansemond County. (Hofmaster, Amos). MARYLAND - Heavy in stored potatoes at St. Inigoes, St. Marys County. (U. Md., Ent. Dept.).

GENERAL VEGETABLES

BEET ARMYWORM (Spodoptera exigua) - ARIZONA - Larvae increasing in some lettuce fields in Maricopa County. Damage light to moderate. (Ariz. Coop. Sur.).

CABBAGE LOOPER (Trichoplusia ni) - ARIZONA - Heavy numbers damaging lettuce in Maricopa and Yuma Counties. Repeated controls necessary to prevent excessive damage. (Ariz. Coop. Sur.). VIRGINIA - Considerable number of eggs observed on Eastern Shore during first week of October; heavy population expected to develop throughout October. (Hofmaster).

SALT-MARSH CATERPILLAR (*Estigmene acrea*) - ARIZONA - Larvae migrating from cotton to vegetables. Foil barriers necessary in Yuma County. (Ariz. Coop. Sur.).

ONION MAGGOT (*Hylemya antiqua*) - CALIFORNIA - Larvae and pupae heavy in roots of green onion nursery stock at San Jose, Santa Clara County. (Cal. Coop. Rpt.).

DECIDUOUS FRUITS AND NUTS

WALNUT CATERPILLAR (*Datana integerrima*) - OKLAHOMA - Continues heavy on pecans in Mayes County. (Okla. Coop. Sur.).

PECAN WEEVIL (*Curculio caryae*) - OKLAHOMA - Moderate in pecans in Tillman County; light in Mayes County. (Okla. Coop. Sur.).

ORNAMENTALS

AZALEA LACE BUG (*Stephanitis pyrioides*) - ALABAMA - Heavy isolated infestations noted on azalea in Lee County. (Doughty).

WHITE PEACH SCALE (*Pseudaulacaspis pentagona*) - ALABAMA - Heavy on ornamental mulberry and cottonwood trees in Clay County. (Owens).

HEMISPHERICAL SCALE (*Saissetia coffeae*) - CALIFORNIA - Heavy on eugenia nursery stock in Ontario, San Bernardino County. (Cal. Coop. Rpt.).

A FALSE POWDER-POST BEETLE (*Melalgus confertus*) - CALIFORNIA - Larvae occurring in Conadria fig nursery stock in Grass Valley, Nevada County. (Cal. Coop. Rpt.).

FOREST AND SHADE TREES

ENGRAVER BEETLES (*Ips* spp.) - VIRGINIA - Increasing in several Coastal Plain counties; damaging several trees in Piedmont area. (For. Pest Surv. Rpt., Sept. Sum.).

SOUTHERN PINE BEETLE (*Dendroctonus frontalis*) - VIRGINIA - Active in Coastal Plain district; sharp increase noted in Piedmont district. (For. Pest Surv. Rpt., Sept. Sum.).

WHITE-PINE WEEVIL (*Pissodes strobi*) - VIRGINIA - Decreased in western section of State; increased slightly in Piedmont counties. (For. Pest Surv. Rpt., Sept. Sum.).

NANTUCKET PINE TIP MOTH (*Rhyacionia frustrana*) - VIRGINIA - Damage evident in Nelson, Rockingham and Pulaski Counties. (For. Pest Surv. Rpt., Sept. Sum.).

FALL WEBWORM (*Hyphantria cunea*) - NEW MEXICO - Moderate to heavy, causing partial to complete defoliation of poplar, pecan and elm trees throughout Dona Ana County. (Hare).

RED-HEADED PINE SAWFLY (*Neodiprion lecontei*) - VIRGINIA - No increase observed in 1966. (For. Pest Surv. Rpt., Sept. Sum.).

AN APHID (*Myzocallis walshii*) - VIRGINIA - Heavy on red oaks at Big Meadows Lodge on Skyline Drive, Shenandoah National Park, September 6, 1966. Leaves heavy with honeydew. Collected by H. H. Shepard. Det. by A. N. Tissot. New State record. (Leonard).

MAN AND ANIMALS

HORN FLY (Haematobia irritans) - OKLAHOMA - Moderate on cattle in Cotton County. (Okla. Coop. Sur.).

HOUSE FLY (Musca domestica) - MISSISSIPPI - Adults and larvae heavy in commercial chickenhouses in Simpson County. (Dinkins, Oct. 14).

MOSQUITOES - LOUISIANA - Larval collections in Jefferson Parish contained: Anopheles quadrimaculatus, Culex pipiens quinquefasciatus, Culex restuans, Culex salinarius, and Culex tarsalis. Light trap collections increased sharply in Wentwood area; Culex salinarius predominant species. (Stokes).

SOUTHERN FIRE ANT (Solenopsis xyloni) - CALIFORNIA - Medium in cotton fields in Niland, Imperial County; may delay harvest by annoying workers. (Cal. Coop. Rpt.).

SCREW-WORM (Cochliomyia hominivorax) - Total of 156 cases reported in U. S. October 16-22 as follows: TEXAS - Goliad, Lamb, Mitchell, Callahan, Bexar, Irion, Coryell, Crane, Kerr, Kimble, Hudspeth, Williamson, Jim Hogg, Comal, Menard, Brooks, McLennan, 1 each; Duval, Pecos, Gonzales, Medina, Scurry, Reeves, 2 each; Webb 9, Val Verde 14, Jeff Davis 4, Brewster 6, Presidio 12, Frio 5, Zavala 8, Maverick 9, Dimmit 6, Edwards 6, Uvalde 3, Terrell 3, Sutton 4, Kinney 5. ARIZONA - Maricopa 6, Mohave 3, Pima 5, Yavapai 1, Yuma 3, Pinal 3, Cochise 1, Gila 1, Greenlee 1, Graham 6. NEW MEXICO - Luna 1, Eddy 1. CALIFORNIA - Imperial 1. Total of 379 cases reported in portion of Barrier Zone in Republic of Mexico as follows: Territorio sur de Baja California 29, Sonora 166, Chihuahua 105, Coahuila 48, Nuevo Leon 19, Tamaulipas 12. Total of 619 cases reported from Mexico south of Barrier Zone. Barrier Zone is area where eradication operations underway to prevent establishment of self-sustaining population in U. S. Sterile screw-worm flies released: Texas 62,428,250, Arizona 8,644,000, New Mexico 1,276,000, California 1,516,000, Mexico 21,908,000. (Anim. Health Div.).

HOUSEHOLDS AND STRUCTURES

A WEEVIL (Brachyrhinus cribricollis) - CALIFORNIA - Adults heavy and migrating to walls of nursery in San Diego, San Diego County. Many infestations occurring over State. (Cal. Coop. Rpt.).

A POWDER-POST BEETLE (Trogoxylon prostomoides) - CALIFORNIA - Adults medium in bamboo curtains in residence in Crescent City, Del Norte County. (Cal. Coop. Rpt.).

BENEFICIAL INSECTS

A DAMSEL BUG (Nabis sp.) - WYOMING - Adults 6-8 per 25 sweeps in alfalfa fields of Goshen County. (Haws, Marks).

LADY BEETLES - ALABAMA - Hippodamia convergens (convergent lady beetle) heavy in cotton over State; Chrysopa oculata and Geocoris punctipes also heavy. Several thousand Coleomegilla maculata fuscilabris present over 50-square-foot hibernation area adjacent to field of corn in St. Clair County. (McQueen).

FEDERAL & STATE PLANT PROTECTION PROGRAMS

GRASSHOPPERS - MINNESOTA - Egg survey week ending October 14 indicated noneconomic to light infestations in most fields. General hard freeze October 15 probably stopped egg laying for season. (Minn. Ins. Rpt.). NORTH DAKOTA - Adults 3 per square yard in field margins of Richland and Ransom Counties. Egg laying continues; few *Melanoplus femurrubrum* still mating. *M. bivittatus* and *M. differentialis* also noted. (Brandvik, Oct. 14). WYOMING - Adult survey completed in 17 counties; economic on 1,711,000 acres of rangeland; over 8 per square yard. Total of 2,342,000 acres infested in 1965. Most heavily infested counties as follows: Campbell 525,000 acres; Converse 100,000 acres; Johnson 208,000 acres; Niobrara 205,000 acres; Platte 100,000 acres; Sheridan 260,000 acres. (Watson).

PINK BOLLWORM (*Pectinophora gossypiella*) - NEVADA - Four adults collected in Pahrump Valley, Nye County. Exact date and location uncertain. Det. by H. H. Blakemore and R. W. Hodges. New State record. (Bechtel). CALIFORNIA - Sex lure traps show spread in quarantined desert cotton areas. Adults also collected in Sandy Valley, San Bernardino County. One male taken at Cantil, Kern County, October 18. New county record. Treatment underway in Imperial, Coachella and Borrego Valleys. Larvae appearing in gin trash in Palo Verde Valley, Riverside County. Collections so far this season: Imperial County - Bard Valley 971 adults, 585 larvae; Imperial Valley 970 adults, 74 larvae. San Diego County - Borrego Valley 23 adults. Riverside County - Pal Verde Valley 2,706 adults, 872 larvae; Coachella Valley 46 adults. San Bernardino County - Sandy Valley one adult, Needles 23 adults. Kern County - Cantil one adult. (Cal. Coop. Rpt.). ARIZONA - New infestations detected near Winkleman in northeast Pinal County week ending October 24. Additional infestations found south of Stanfield, south of Casa Grande and near Chu Chu. New infestations continue to be found in Yuma County. (Ariz. Coop. Sur.). NEW MEXICO - Infested green bolls ranged 4-48 percent from Roswell, Chaves County, to Artesia, Eddy County. Ranged 0-28 percent infested green bolls in Lea County. Frost in Chaves and northern Dona Ana Counties caused young green bolls to "sour" and rot. (Mathews, Nielsen). TEXAS - Infestations general in Waco area; however, lower than last year. (PPC South. Reg., Sept. Rpt.). OKLAHOMA - First of season found in lint cleaner inspections in Greer, Kiowa and Bryan Counties. Inspections in Jackson, Tillman, Harmon, Love, Marshall, Canadian, and Caddo Counties negative. (Okla. Coop. Sur.).

BOLL WEEVIL (*Anthonomus grandis*) - TEXAS - Several infestations found outside the High Plains control zone; heavy buildup in Rolling Plains area of Borden County. (PPC South. Reg., Sept. Rpt.).

BOLL WEEVIL COMPLEX (*Anthonomus grandis* complex) - ARIZONA - Light to moderate numbers of larvae and adults found in area south of Stanfield, Pinal County. (Ariz. Coop. Sur.).

WHITE-FRINGED BEETLES (*Graphognathus* spp.) - Surveys continued negative in NEW JERSEY, PENNSYLVANIA, WEST VIRGINIA and Metropolitan WASHINGTON, D. C., area. Fifteen new infested sites found in Norfolk area, VIRGINIA. Delimiting surveys continued around Temple Hills, Prince Georges County, MARYLAND. (PPC East. Reg., Sept. Rpt.). Found for the first time at Brinkley, Monroe County, ARKANSAS, and Belmont, Tishomingo County, MISSISSIPPI. (PPC South. Reg., Sept. Rpt.).

EUROPEAN CHAFER (*Amphimallon majalis*) - MASSACHUSETTS - Total of 81 acres treated at isolated infested area at Charlton, Worcester County, by September 30; treatment to continue. Treatment of isolated infestation in vicinity of naval shipyard at South Boston planned; involves soil treatment of approximately 230 acres. NEW JERSEY - Treatment of infested areas in Port Newark, Essex County, began September 26; total of 42 acres treated. (PPC East. Reg.).

GYPSY MOTH (*Porthetria dispar*) - NEW JERSEY - During September, 12 moths recovered at 6 sites; 534 moths recovered from 269 sites during season. (PPC East. Reg.).

IMPORTED FIRE ANT (*Solenopsis saevissima richteri*) - ALABAMA - Heavy populations constructed mounds somewhat higher than usual in fields and other areas in Chilton, Coosa, Talladega, St. Clair and other counties as result of recent rains. Mounds 12-18 inches high not uncommon. Farmers experiencing considerable stinging and irritation during harvesting. (Harmon et al.).

CITRUS WHITEFLY (*Dialeurodes citri*) - CALIFORNIA - Infestation found in southeast San Diego, San Diego County, October 17; now known to occur in 8-block area. (Cal. Coop. Rpt.).

WHITE GARDEN SNAIL (*Theba pisana*) - CALIFORNIA - Total of 25 properties infested in 7 city-block area of Manhattan Beach, Los Angeles. (PPC West. Reg., Sept. Rpt.).

MEDITERRANEAN FRUIT FLY (*Ceratitis capitata*) - TEXAS - Trap collections and fruit cutting negative for month. (PPC South. Reg., Sept. Rpt.).

INSECT DETECTION

New United States Record

AN APHID (*Aphis craccae* Linnaeus) - MAINE - Collected from wild vetch at Augusta, Kennebec County, July 7, 1966, by J. O. Pepper and A. N. Tissot. Although *A. craccae* occurs on *Vicia cracca* and *V. sativa*, occasionally grown as agricultural crops in Europe, and on *V. faba*, the common broadbean, it is not reported to be seriously injurious. Det. L. M. Russell. (p. 1021).

New State Records

SOUTHWESTERN CORN BORER (*Zeadiatraea grandiosella*) - KENTUCKY - Collected for first time in State October 6, 1966. Present in 8 counties. (p. 1011).

AN APHID (*Myzocallis walshii*) - VIRGINIA - Collected from red oak in Shenandoah National Park by H. H. Shepard September 6, 1966. Det. by A. N. Tissot. (p. 1014).

PINK BOLLWORM (*Pectinophora gossypiella*) - NEVADA - Four adults collected in Pahrump Valley. Det. by H. H. Blakemore and R. W. Hodges. (p. 1016).

AN APHID (*Aphis craccae*) - NEW YORK - Collected at Crown Point, Essex County, August 21, 1966, by L. M. Russell and on Wellesley Island, Jefferson County, August 31 and September 1, 1966, by L. L. Pechuman. Det. L. M. Russell. (p. 1021).

New County Records

SOUTHWESTERN CORN BORER (*Zeadiatraea grandiosella*) - ILLINOIS - Found for first time in Jackson, Williamson and Saline Counties. (p. 1011).

PINK BOLLWORM (*Pectinophora gossypiella*) - CALIFORNIA - Single male taken at Cantil, Kern County. (p. 1016).

WHITE-FRINGED BEETLES (*Graphognathus* spp.) - ARKANSAS - Found for first time in Monroe County. MISSISSIPPI - Reported for first time from Tishomingo County. (p. 1016).

CORRECTIONS

CEIR 16(42):991 - PIT SCALES - MARYLAND - Should read: "Cerococcus kalmiae collected from azalea by C. Werner in spring of *1964* at Cheverly, Prince Georges County. Det. by R. F. Wilkey."

CEIR 16(42):999 - Above "Legend I - Corn and Sorghum Pest Complex," add the following: Total 52,258.14 — 34,602.08 — 127,458.09 *

HAWAII INSECT REPORT

Insects of Regional Significance - All stages of CARMINE SPIDER MITE (Tetranychus telarius) heavy on 3 acres of snap beans and 4 acres of watermelon in Waianae, Oahu. Intensive spraying gave poor results. (Yamamoto).

General Vegetables - All stages of GREENHOUSE WHITEFLY (Trialeurodes vaporariorum) heavy on tomatoes in Kahului, Maui. (Miyahira). Adults of a PLATASPID BUG (Coptosoma xanthogramma) 50-250 per plant on 0.75 acre of snap beans in Kaaawa, Oahu. (Sato). CABBAGE LOOPER (Trichoplusia ni) larvae light on broccoli in Waianae, Oahu. (Jackson). BEET ARMYWORM (Spodoptera exigua) larvae light to medium and causing about 20 percent damage to green onions in Koko Head; adults and larvae light on broccoli in Waianae, Oahu. (Sato, Jackson).

Citrus - FLORIDA RED SCALE (Chrysomphalus aonidum) nymphs and adults light to medium on orchard of Valencia and navel oranges in Waianae, Oahu; heaviest on ripening fruits. (Konishi).

Ornamentals - All stages of a FALSE SPIDER MITE (Brevipalpus phoenicis) heavy in greenhouse at Omao, Kauai; caused severe (50-60 percent) defoliation of anthurium. Det. confirmed by F. H. Haramoto. (Au).

Beneficial Insects - A SCIOMYZID FLY (Sepedon macropus) very active in taro patches in Waihee, Maui. This predaceous insect introduced from Nicaragua in 1958 to aid in control of Lymnaea ollula, a freshwater snail and intermediate host of cattle liverfluke. (Miyahira).

Miscellaneous Pests - In leeward Oahu, GIANT AFRICAN SNAIL (Achatina fulica) moved from bordering thickets in Lualualei and Waianae and moderately damaged one acre of eggplant and 0.5 acre of tomatoes. Substantial rainfall during past two weeks initiated condition. On Maui, snail activity heavy in vicinity of Wailuku. (Yamamoto, Takishita).

Weather continued from page 1010.

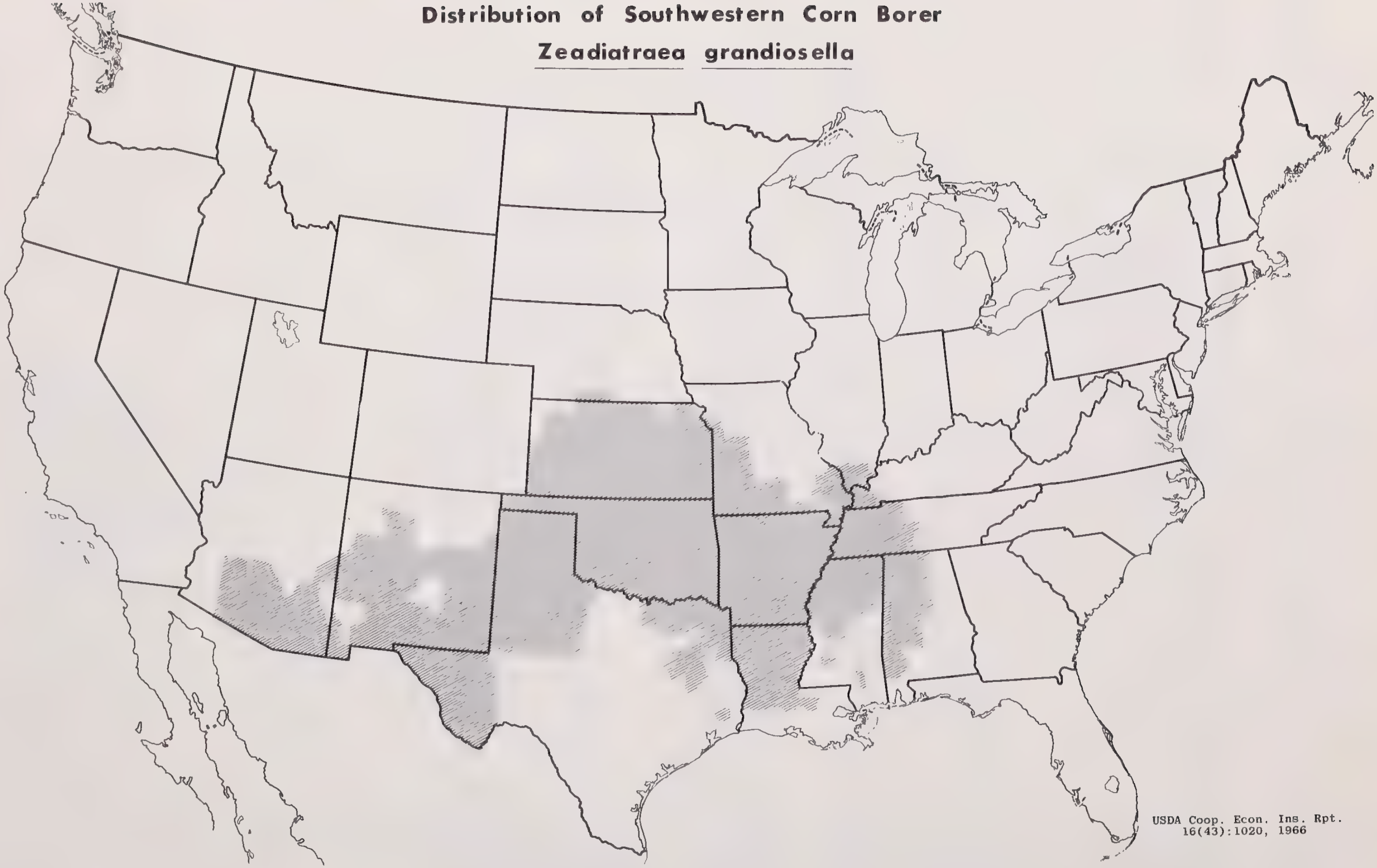
Heavy showers developed over southern Florida on Friday, continued on Saturday, and ended Sunday, leaving over 8 inches of rain in the Palm Beach area. Over the weekend spotty showers occurred along a front that stretched from Mobile, Alabama, to southern Maryland, with localities in Alabama and Mississippi receiving more than an inch of rain on Sunday. Weekly precipitation totals in northern Georgia exceeded 6 inches. Most of California, Nevada, Utah, Arizona, and New Mexico received no measurable precipitation, while only light rain or snow fell from the northern and central Rockies to the Great Lakes. (Summary supplied by Environmental Data Service, ESSA).

LIGHT TRAP COLLECTIONS

	Temperature °F.	Precipitation (inches)	Type of trap (BL = blacklight, I = incandescent, MV = mercury vapor, O = other)	*Agrotis ipsilon* (black cutworm)	*Carpocapsa pomonella* (codling moth)	*Chorizagrotis auxiliaris* (army cutworm)	*Estigmene acrea* (salt-marsh caterpillar)	*Faronta diffusa* (wheat head armyworm)	*Feltia subterranea* (granulate cutworm)	*Heliothis virescens* (tobacco budworm)	*H. zea* (bollworm, corn earworm, tomato fruitworm)	*Loxostege commixtalis* (alfalfa webworm)	*Loxostege similalis* (garden webworm)	*Loxostege sticticalis* (beet webworm)	*Manduca quinquemaculata* (tomato hornworm)	*Manduca sexta* (tobacco hornworm)	*Ostrinia nubilalis* (European corn borer)	*Peridroma saucia* (variegated cutworm)	*Prodenia ornithogalli* (yellow-striped armyworm)	*Pseudaletia unipuncta* (armyworm)	*Spodoptera exigua* (beet armyworm)	*Spodoptera frugiperda* (fall armyworm)	*Trichoplusia ni* (cabbage looper)	Crops
FLORIDA																								
Gainesville 10/17				8			20		2											11		9		
Sanford 10/11-14				17					20	1	7				1					9				
GEORGIA																								
Tifton 10/13-19	54-80	None	BL								36													
MISSISSIPPI																								
Stoneville 10/14-20	40-85	1.93	2BL	10					51		347							2	13	49	97	34	5	
NEBRASKA																								
Lincoln 10/1-8				9							8							3	4	5				
TENNESSEE (Counties)																								
Maury 10/4-10				4					4		44							4	12	78		36		
Maury 10/11-17				12					4		36								16	42		12		
Robertson 10/4-10				8					4		32					2		4	18	54		54		
Robertson 10/11-17				14					2		226								12	46		2		
Cumberland 10/4-10				18							42							8	26	68		46		
Cumberland 10/11-17				12					2		24								12	56		36		
TEXAS																								
Waco 10/15-21			BL	3					76									12	2	87	21	19	10	
Brownsville 10/15-21				62			7		18		65				3	3		7	42	5	40	35	17	
WISCONSIN																								
Madison 10/13-20				22							3							5		8				

Distribution of Southwestern Corn Borer

Zeadiatraea grandiosella



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Aphis craccae Linnaeus, an Aphid Newly Discovered in the United States (Homoptera: Aphididae)

Louise M. Russell 1/

Aphis craccae Linnaeus, a Palearctic species, was collected from wild vetch at Augusta, Maine, July 7, 1966, by J. O. Pepper of the Pennsylvania State University, and A. N. Tissot of the University of Florida. As far as known, this was the first collection of this aphid in the United States. On August 21, 1966, I collected craccae from Vicia cracca at Crown Point, Essex County, New York, and L. L. Pechuman of Cornell University took samples from Vicia sp. on Wellesley Island, Jefferson County, New York, August 31 and September 1, 1966. Although these are the only known collections of craccae in the United States, it is possible that the species is present in New Hampshire, Vermont, and other northern States.

A. craccae had been found previously in Canada. It was reported from Vicia cracca, Quebec, by F. W. Quednau (Canad. Ent. 98(4): 426, 1966), and was observed in Fredericton, New Brunswick, in early summer, 1966, by M. E. MacGillivray and Jean Adams of the Canada Department of Agriculture. Both of these workers, who are familiar with the aphids of the Fredericton area, stated that they had not observed the species before this year. Examination of aphids from vetch in the collection of the U. S. National Museum did not reveal examples of craccae taken before 1966. Thus it is likely that the aphid is comparatively new in North America.

Samples collected July 7 in Maine and July 11 in New Brunswick consisted entirely of viviparous forms. In the New York collections, taken in August and September, however, the majority of specimens were oviparous females, but a few males and viviparous females were present. In all collections that I have examined, the aphids were densely clustered on the terminal growth of the vetch (principally on the stems but with a few on leaves and seed pods), nymphs were more numerous than adults, the insects were not attended by ants, and there was no evidence of parasitism.

Distribution - United States: Maine, New York; Canada: New Brunswick, Quebec; all Europe according to G. Remaudière (Fauna terrestre et d'eau douce des Pyrénées - Orientales, fasc. 2: 16, 1959); China and Japan according to C. C. Tao (Agr. Res. (Taiwan) 8(1):5, 1958).

Hosts - Vicia cassubica, V. cracca, V. dumetorum, V. faba, V. hirsuta, V. lutea, V. pseudocraccae, V. sativa, V. tenuifolia, V. villosa, Vicia spp. Although Aphis craccae has been reported from each of these species of Vicia it is recorded most frequently from cracca, less frequently from sativa, and infrequently from the other species. Frej Ossiannilsson (Lantbrukshögskolans Ann. 30: 463, 1964) listed craccae only on V. cracca in Sweden, and several other European workers have reported the aphid on this plant. Indeed, U. Falk (Wiss. Ztschr. der Univ. Rostock 7(4): 628, 1957/58) stated that in experiments in Germany, craccae left all species of Vicia except cracca within a few days. Tao (op. cit.) reported craccae from Vicia sp. in China and Japan, and (Plant Protect. Bul. (Taiwan) 4(3): 106, 1962) from Vicia faba. The last is the only report I have found of craccae on V. faba. In America craccae is known from V. cracca and Vicia sp. It is possible that the unidentified Vicia also is cracca for this is a common species in New Brunswick, Maine, and New York.

Economic importance - Aphis craccae is not reported to be seriously injurious even though it lives on V. cracca and V. sativa, species that are sometimes grown as agricultural crops in Europe, and on V. faba, the common broadbean. In new Brunswick and New York, where the aphid occurred abundantly, there was little apparent damage at the time I observed the infestations. In Crown Point, New York,

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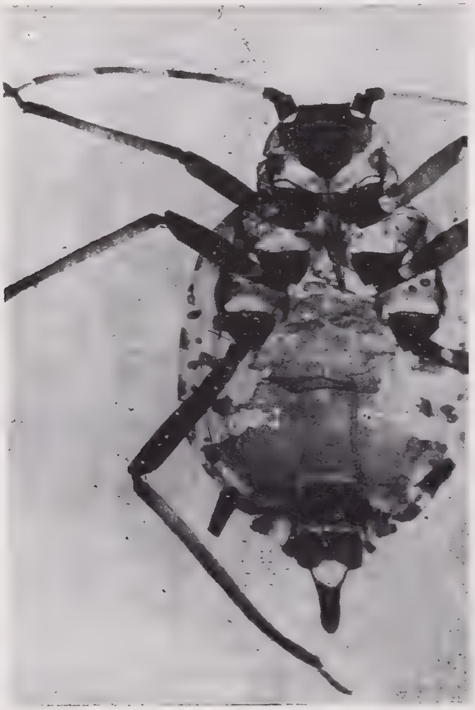
the vetch grew in a meadow that was predominantly alfalfa with a few red clover plants and a little timothy grass. Though the vetch and other legumes were sometimes nearly contiguous, aphids were present only on the vetch. Aphis craccae has been tested in the transmission of plant diseases. In experiments, it successfully transmitted bean yellow mosaic and cucumber mosaic, but did not transmit cabbage black ring spot, according to J. S. Kennedy, M. F. Day, and V. F. Eastop (A Conspectus of Aphids as Vectors of Plant Viruses, p. 55, 1962).

Distinguishing characters - In North America Aphis craccae is most likely to be confused with A. craccivora Koch and A. fabae Scopoli. All are "black aphids" that live on vetch, but craccivora and fabae live on many other plants as well. In this country living specimens of craccae can readily be distinguished from the other two species by its dense covering of gray or whitish, coarse, pulverulent, waxy secretion. Both craccivora and fabae lack such a secretion in the adult stage. Also in America, cleared, slide mounted specimens of the three species may be separated on the basis of morphological characters. The most conspicuous differences are in the comparative length of the cornicles, and the number of setae on the cauda, in winged and wingless specimens; in the sclerotization of the abdomen in apterae; in the number of secondary sensoria on antennal segment III and their presence or absence on IV in alatae. The key on the following page will help to separate the three species.



Aphis craccae
Apterous viviparous female
after Falk (op. cit.)

Key to Adult Viviparae

1. Living insects..2
   Cleared, slide mounted insects...4

2. Densely covered with a gray or whitish, coarse, pulverulent, waxy secretion
   ....*craccae*
   Not densely covered with a waxy secretion................................3

3. Dorsum shining black...*craccivora*
   Dorsum dull black...*fabae*

4. Wingless adults..5
   Winged adults..7

5. Abdomen without a conspicuous dorsal sclerotized area..................*fabae*
   Abdomen with a conspicuous dorsal sclerotized area.......................6

6. Sclerotized area variable but usually in the shape of an inverted T, present in median area of terga I-IV, then widened to the lateral or marginal areas of terga V-VII or VIII; cornicles shorter than (.14: .20 mm) to as long as (.24: .24 mm) the cauda; cauda with 8-13 (usually 9-11) setae........*craccae*
   Sclerotized area variable but not in the shape of an inverted T, absent from tergum I, and absent or present from terga II-IV, but if present on the latter extending almost, or completely, across them, and across terga V-VII; cornicles usually conspicuously longer (.35: .20 mm) than the cauda; cauda with 4-9 (usually 5-7) setae...*craccivora*

7. Antennal segment III with 12-18, and segment IV usually with 1-7, secondary sensoria..*fabae*
   Antennal segment III usually with less than 12, and segment IV without, secondary sensoria..8

8. Cauda with 8-13 (usually 9-11) setae; cornicles usually shorter, or at most not longer than the cauda...*craccae*
   Cauda with 4-9 (unusually 5-7) setae; cornicles usually distinctly longer than the cauda...*craccivora*

Synonymy - *Aphis craccae* Linnaeus also has been cited as *Aphis viciae craccae* Linnaeus, *Aphis viciae* Fabricius, *Aphis* (*Pergandeida*) *craccae* (Linnaeus), *Pergandeida craccae* (Linnaeus), *Brachyunguis craccae* (Linnaeus), and *Microsiphon craccae* (Schrank).

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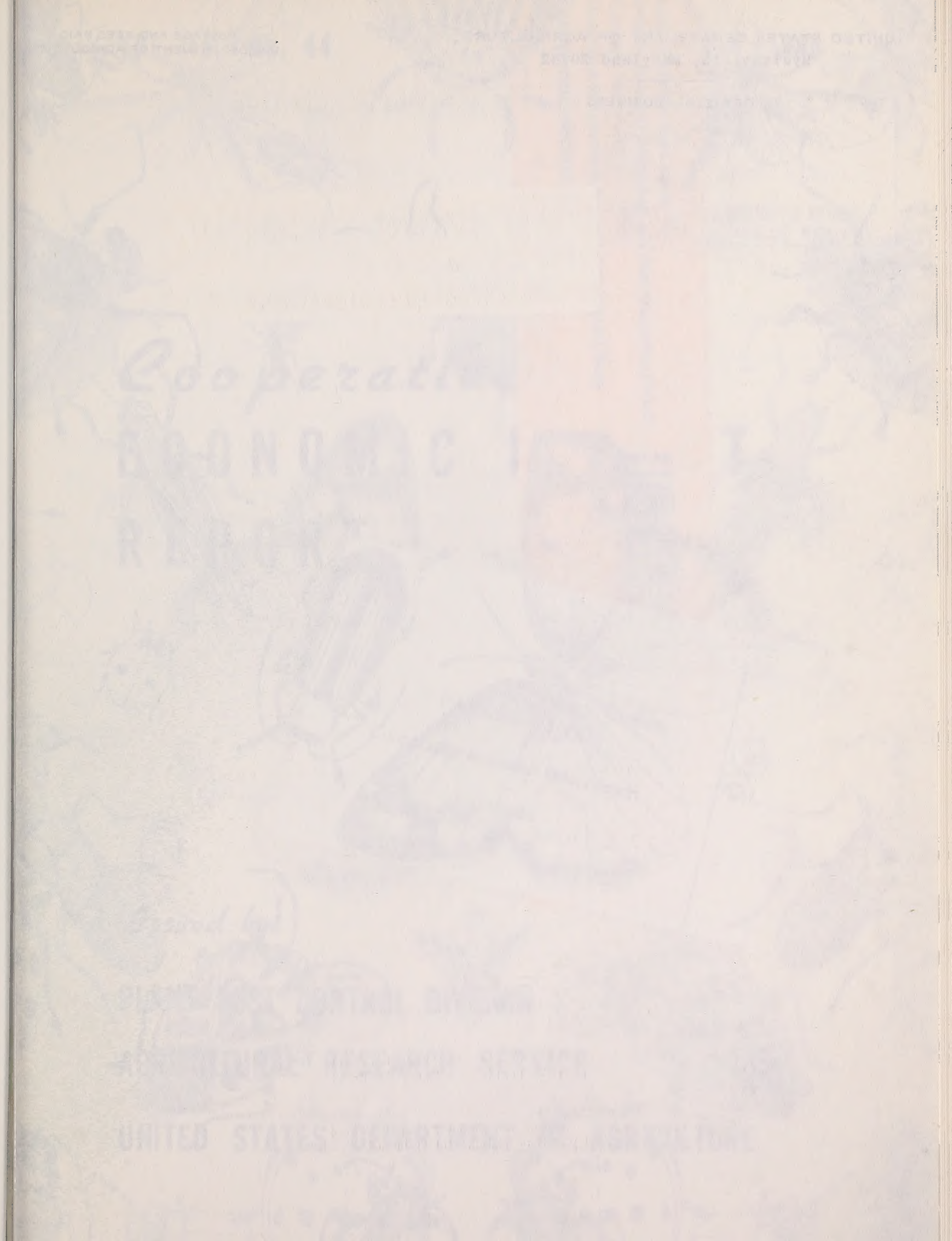

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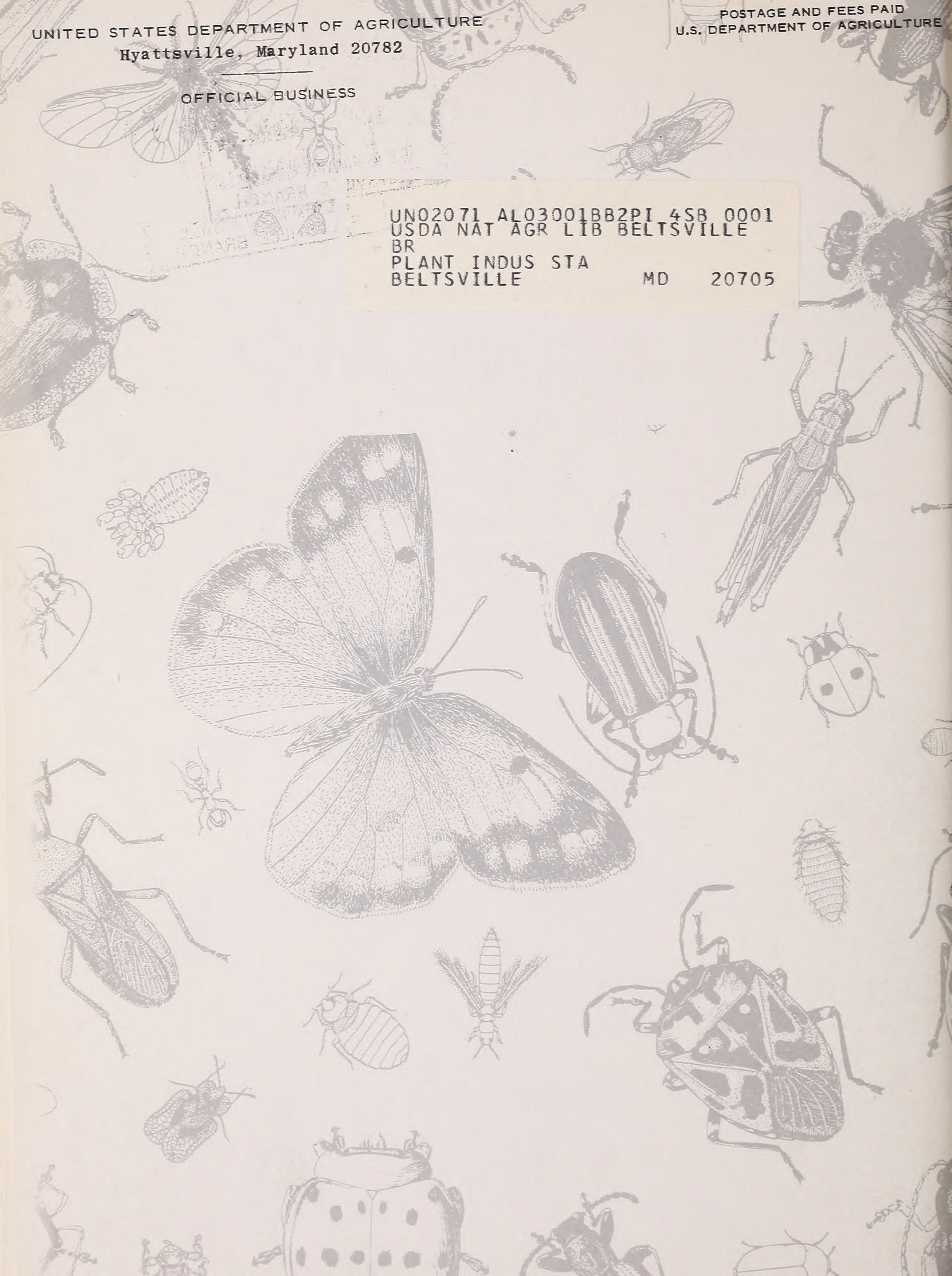

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